

ABSTRACT

A SWITCH AND A SWITCHING METHOD

A switch at a transmission end of a system comprises a number of memory devices defining queues (1-4) for receiving traffic to be switched, each 5 queue having an associated predetermined priority classification, and a processor for controlling the transmission of traffic from the queues (1-4) to an output (5,6), the processor being configured to transmit traffic from the higher priority classified queues before traffic from lower priority classified queues, the traffic having a predetermined minimum transmittable element such as any one 10 of a slot and a bit, wherein the processor is configured to monitor the queues (1-4) to determine whether traffic has arrived at a queue having a higher priority classification than the queue from which traffic is currently being transmitted, the processor being responsive to suspend the current transmission after transmission of the current minimum transmittable element if traffic has arrived 15 at a higher priority classified queue and thereafter transmit traffic from that queue, and subsequently resume the suspended transmission. At a reception end, a complementary switch comprises an input from which a data stream is received, the data stream comprising interleaved portions of traffic, a number of output queues (30-60) and a processor (20), wherein the processor is 20 configured to separate the interleaved traffic into respective ones of the output queues for reassembly of individual traffic streams from the data stream.

[Fig. 3]